

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P148813

Luminaire Tested: **VWM-F04-LED-E1-RW-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P148813
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F04-LED-E1-RW-8030
Description: VISION WALL MEDIUM LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8706.2 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

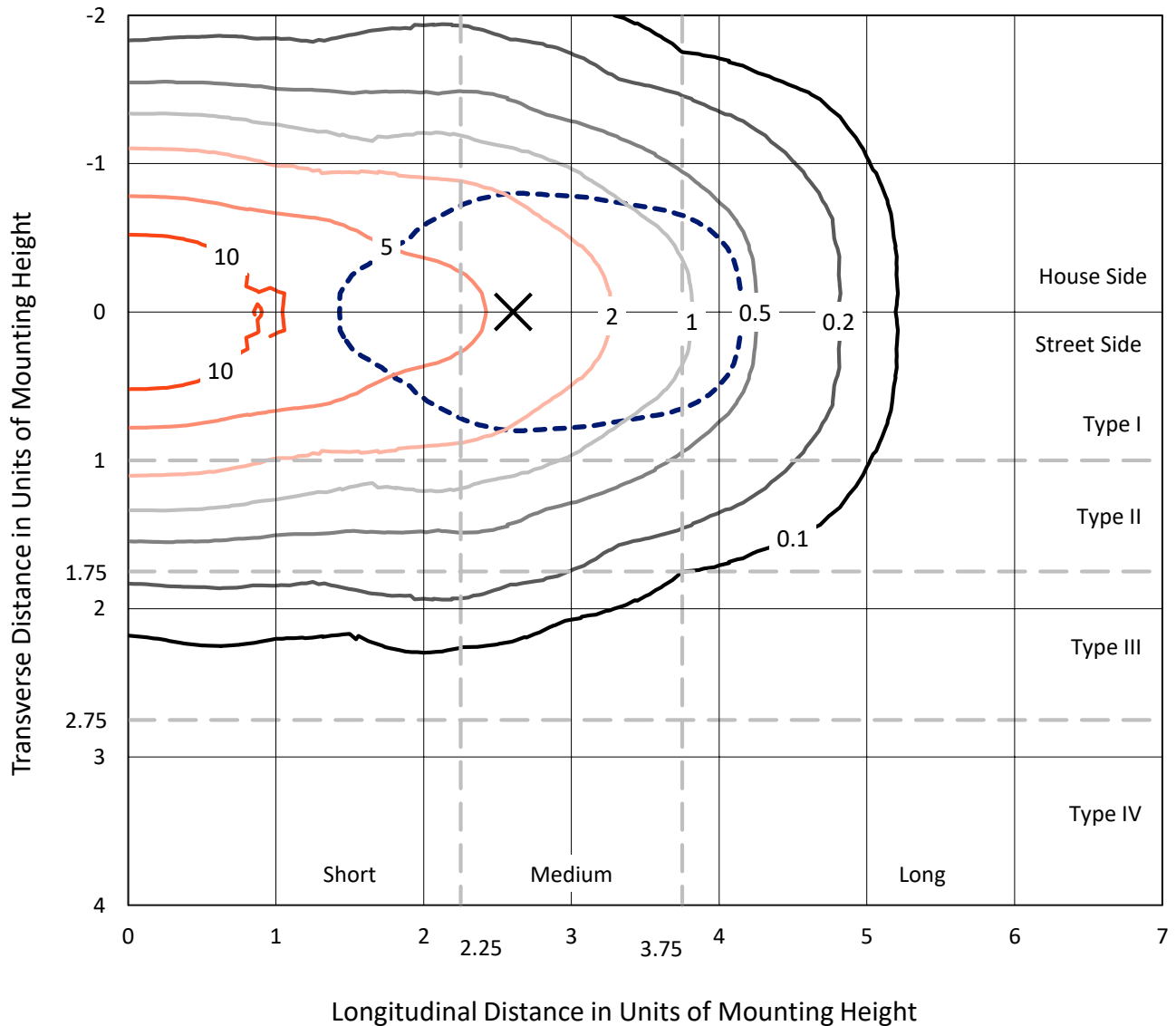
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

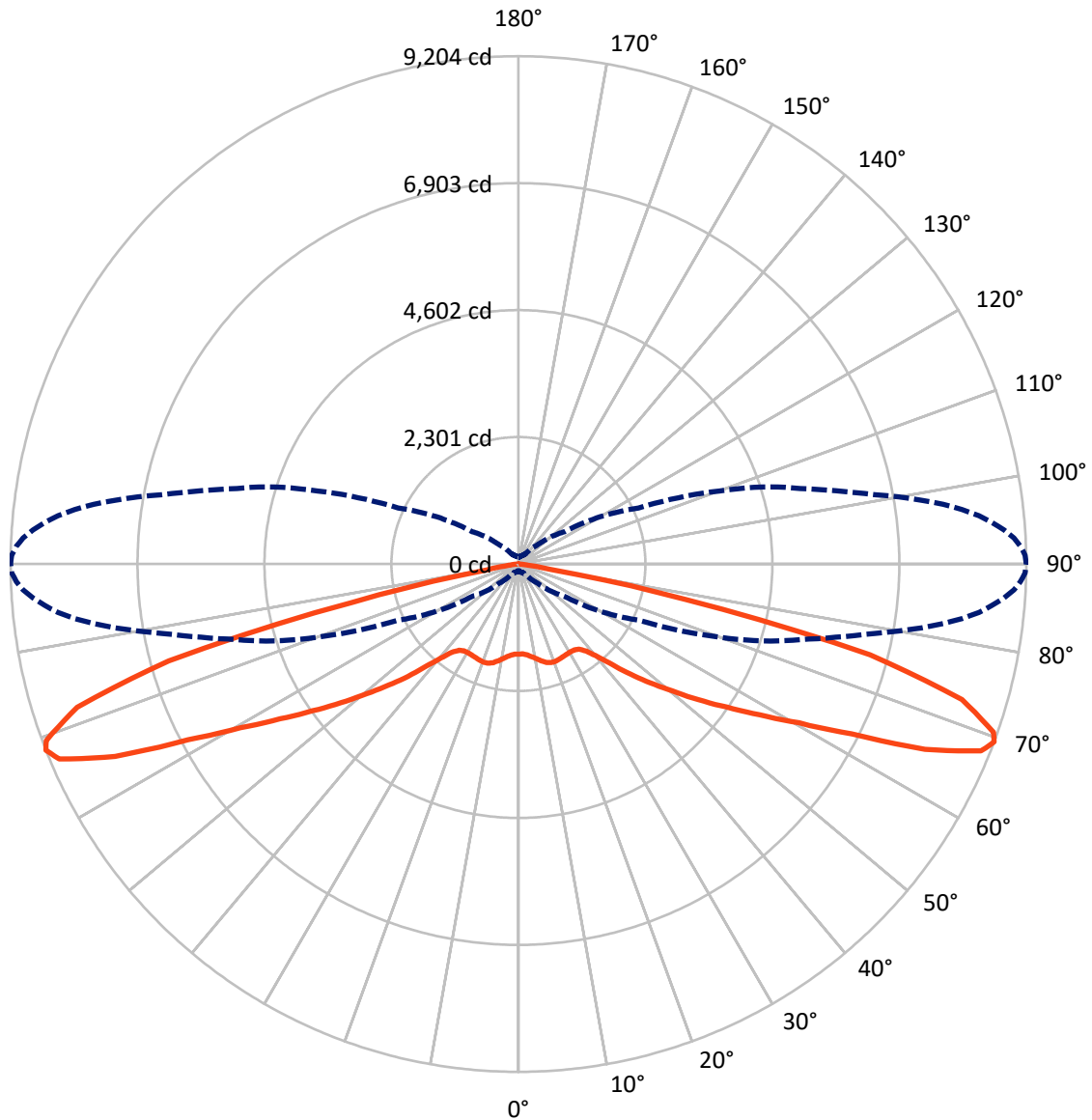
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.7 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4353.1	0.0	4353.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4353.1	0.0	4353.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	8706.2	0.0	8706.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	1.8
10°-20°	504.8	5.8
20°-30°	817.8	9.4
30°-40°	1019.2	11.7
40°-50°	1273.6	14.6
50°-60°	1572.6	18.1
60°-70°	1954.0	22.4
70°-80°	1297.2	14.9
80°-90°	107.1	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8706.2	100.0
0°-180°	8706.2	100.0



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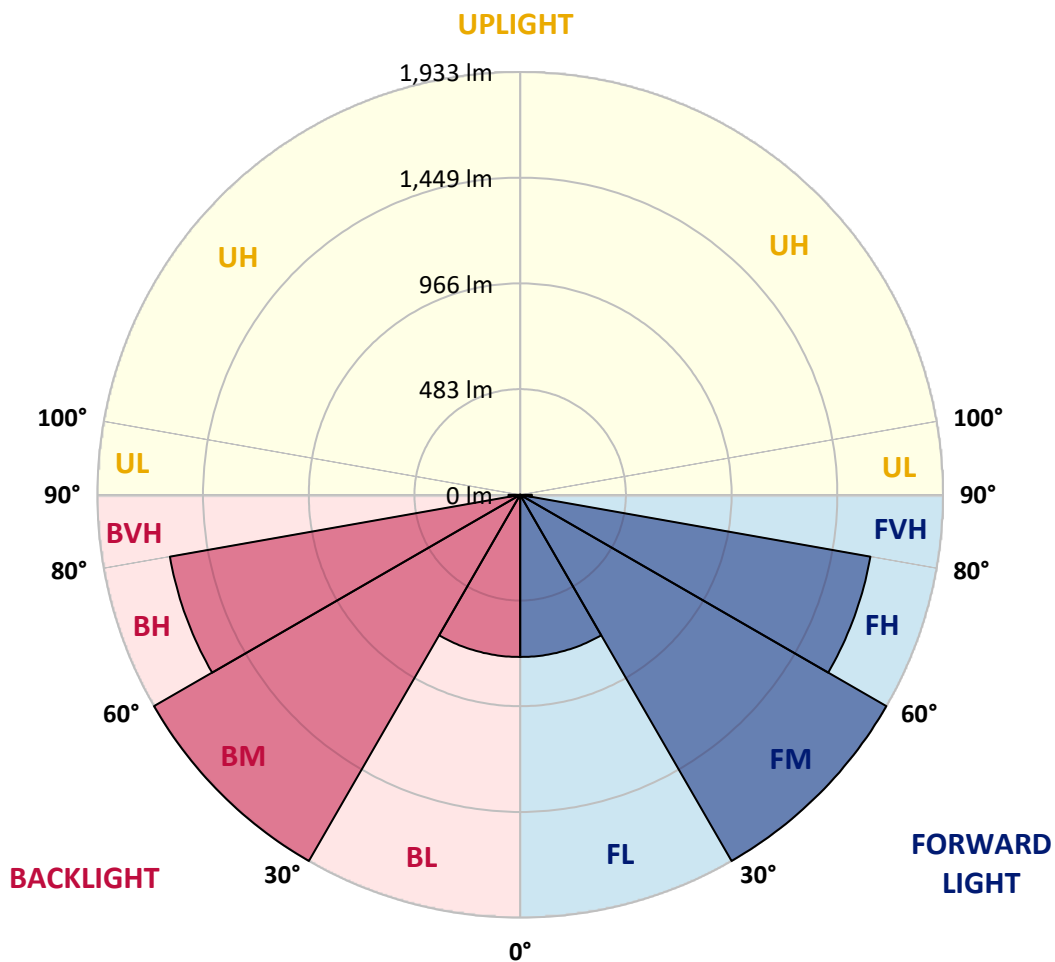
CATALOG NUMBER: VWM-F04-LED-E1-RW-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	741.3	8.5			
FM	(30°-60°)	1932.7	22.2			
FH	(60°-80°)	1625.6	18.7			G1/1800
FVH	(80°-90°)	53.6	0.6			G1/100
BL	(0°-30°)	741.3	8.5	B2/1000		
BM	(30°-60°)	1932.7	22.2	B2/2500		
BH	(60°-80°)	1625.6	18.7	B3/2500		G3/2500
BVH	(80°-90°)	53.6	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3
2.5°	1638.7	1640.1	1639.2	1641.0	1640.6	1640.6	1639.6	1637.8	1637.6	1637.3	1637.1
5°	1654.5	1652.6	1655.4	1658.2	1657.3	1657.8	1657.3	1657.3	1657.1	1656.9	1656.8
7.5°	1671.2	1670.8	1672.6	1680.0	1681.0	1683.8	1687.0	1689.4	1689.4	1689.5	1689.6
10°	1685.6	1686.1	1690.8	1701.4	1707.0	1715.8	1724.6	1731.6	1732.2	1732.7	1733.2
12.5°	1697.2	1697.7	1704.6	1721.4	1734.9	1751.6	1770.6	1781.3	1782.2	1783.2	1784.1
15°	1698.2	1699.6	1711.6	1739.0	1766.0	1793.4	1816.2	1830.6	1831.3	1832.0	1832.8
17.5°	1686.1	1687.0	1707.4	1747.8	1792.9	1835.7	1859.4	1865.8	1866.1	1866.4	1866.7
20°	1654.6	1656.8	1685.6	1745.6	1814.3	1870.0	1894.7	1885.8	1885.0	1884.1	1883.2
22.5°	1603.4	1602.9	1640.6	1721.4	1818.4	1897.0	1918.8	1895.6	1892.8	1890.1	1887.3
25°	1520.8	1526.4	1570.4	1667.0	1794.8	1903.0	1936.0	1900.7	1896.8	1892.8	1888.8
27.5°	1431.1	1434.4	1481.2	1584.8	1739.6	1882.1	1944.4	1910.9	1906.5	1902.1	1897.7
30°	1326.6	1330.8	1380.9	1489.1	1650.8	1828.2	1942.0	1934.2	1929.0	1923.8	1918.7
32.5°	1224.4	1229.0	1274.1	1392.6	1557.4	1754.4	1928.1	1967.1	1961.8	1956.5	1951.2
35°	1118.5	1125.5	1180.3	1300.1	1467.3	1672.2	1906.7	2009.4	2006.5	2003.5	2000.6
37.5°	1030.7	1032.1	1085.1	1210.9	1383.7	1593.7	1878.4	2062.8	2064.9	2067.1	2069.2
40°	932.6	941.5	994.5	1127.3	1308.0	1527.2	1851.4	2135.2	2146.4	2157.5	2168.6
42.5°	844.9	845.8	899.8	1036.7	1225.8	1473.8	1836.6	2222.6	2246.3	2270.0	2293.8
45°	752.4	756.2	804.9	937.3	1131.1	1410.6	1836.2	2323.4	2361.3	2399.2	2437.1
47.5°	665.2	666.6	718.1	841.2	1022.4	1322.4	1832.8	2431.6	2483.2	2534.8	2586.4
50°	581.6	580.2	630.8	749.2	915.0	1206.8	1804.6	2554.2	2619.4	2684.6	2749.7
52.5°	485.9	492.4	544.8	658.2	817.5	1089.2	1721.8	2688.4	2766.4	2844.3	2922.3
55°	392.0	394.8	451.0	557.0	718.6	979.6	1577.9	2812.0	2903.9	2995.8	3087.6
57.5°	288.9	297.3	346.5	451.0	618.2	887.2	1394.9	2876.2	2987.9	3099.7	3211.5
60°	203.9	210.4	254.0	341.8	508.2	790.1	1237.4	2840.4	2985.6	3130.9	3276.2
62.5°	158.8	164.0	198.8	256.0	396.2	693.0	1124.5	2724.7	2922.4	3120.1	3317.8
65°	139.3	144.0	175.6	204.8	295.8	594.1	1062.8	2602.5	2863.8	3125.2	3386.5
67.5°	125.8	131.4	158.9	179.3	241.1	518.4	1046.5	2525.4	2821.4	3117.4	3413.3
69°	119.8	125.4	150.0	167.2	223.9	491.4	1018.6	2404.2	2698.5	2992.7	3287.0
70°	116.2	120.8	143.5	161.2	218.4	472.8	972.1	2252.8	2541.7	2830.7	3119.6
72.5°	107.8	110.1	130.0	147.2	202.5	382.3	747.8	1673.1	1923.6	2174.1	2424.6
75°	95.2	98.0	116.6	133.3	157.9	237.4	473.3	1034.9	1221.9	1408.9	1595.9
77.5°	82.2	84.6	100.8	127.3	122.6	148.1	282.9	576.0	684.4	792.9	901.4
80°	66.0	68.8	83.2	126.4	101.2	115.2	203.4	402.7	432.0	461.2	490.5
82.5°	48.3	50.6	65.0	102.2	77.6	86.9	155.2	341.4	351.6	361.7	371.9
85°	24.6	25.1	41.3	62.2	49.2	45.0	87.3	233.6	240.2	246.7	253.2
87.5°	4.2	4.2	9.3	10.7	12.0	7.4	11.2	40.0	41.2	42.5	43.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3
2.5°	1636.9	1636.6	1635.8	1636.0	1636.6	1636.3	1636.8	1636.9	1637.5	1635.7	1635.4
5°	1656.6	1656.4	1656.3	1656.2	1656.6	1656.5	1656.8	1657.6	1657.4	1656.3	1656.1
7.5°	1689.7	1689.8	1690.3	1689.9	1690.8	1690.3	1689.4	1690.8	1691.8	1692.0	1693.0
10°	1733.7	1734.2	1735.8	1735.6	1737.2	1737.0	1737.2	1738.8	1739.9	1740.0	1741.2
12.5°	1785.0	1786.0	1786.8	1787.6	1789.4	1788.4	1790.6	1791.6	1792.9	1795.7	1794.3
15°	1833.5	1834.3	1836.7	1837.0	1838.5	1839.2	1841.2	1842.0	1842.4	1844.7	1845.1
17.5°	1867.0	1867.2	1868.2	1867.7	1869.1	1868.6	1870.0	1870.8	1872.0	1873.2	1875.3
20°	1882.3	1881.4	1880.9	1880.4	1879.4	1878.0	1878.4	1879.0	1879.2	1880.4	1881.9
22.5°	1884.6	1881.8	1879.0	1877.1	1874.3	1871.9	1869.6	1869.8	1870.0	1869.7	1870.8
25°	1884.9	1881.0	1876.5	1871.2	1867.3	1861.9	1857.5	1857.1	1855.8	1855.9	1856.4
27.5°	1893.3	1888.8	1882.7	1876.5	1868.0	1860.9	1853.8	1851.3	1848.8	1847.2	1846.5
30°	1913.5	1908.4	1901.0	1893.1	1883.9	1872.8	1862.6	1859.4	1855.8	1852.7	1850.0
32.5°	1945.9	1940.6	1932.4	1924.3	1912.0	1901.0	1891.0	1885.9	1880.7	1875.2	1870.0
35°	1997.7	1994.8	1987.6	1980.4	1971.3	1962.7	1953.6	1947.9	1939.4	1935.0	1928.7
37.5°	2071.3	2073.5	2073.5	2074.4	2071.6	2067.4	2061.0	2054.9	2052.1	2040.5	2033.1
40°	2179.7	2190.8	2200.9	2208.8	2215.7	2222.6	2228.6	2225.1	2226.2	2223.2	2218.7
42.5°	2317.5	2341.2	2363.0	2384.7	2400.3	2424.8	2441.8	2447.2	2461.0	2466.4	2476.4
45°	2475.0	2512.9	2549.3	2582.9	2614.2	2649.3	2683.4	2708.7	2736.4	2767.8	2799.2
47.5°	2638.0	2689.6	2743.3	2787.2	2832.5	2884.2	2929.5	2967.8	3017.5	3063.6	3114.3
50°	2814.9	2880.0	2941.1	2995.3	3053.5	3113.2	3175.2	3231.4	3298.6	3372.4	3452.2
52.5°	3000.2	3078.2	3148.9	3216.8	3285.1	3353.5	3419.6	3498.8	3581.8	3679.1	3778.8
55°	3179.5	3271.4	3351.6	3427.1	3505.4	3581.8	3650.0	3756.0	3857.8	3974.0	4104.2
57.5°	3323.3	3435.1	3527.6	3617.3	3705.6	3786.9	3870.6	3990.2	4119.9	4255.8	4420.8
60°	3421.5	3566.8	3684.9	3792.7	3901.0	4003.3	4099.6	4255.8	4410.2	4579.0	4784.5
62.5°	3515.5	3713.2	3867.2	4014.2	4160.4	4291.6	4411.2	4607.8	4809.5	5018.2	5262.6
65°	3647.8	3909.2	4136.0	4341.0	4543.3	4736.2	4915.2	5164.3	5418.9	5693.5	5985.3
67.5°	3709.3	4005.3	4300.7	4577.1	4834.0	5078.3	5308.2	5609.3	5909.0	6227.2	6579.9
69°	3581.2	3875.5	4191.3	4493.2	4776.9	5036.1	5285.0	5592.4	5904.0	6229.0	6584.7
70°	3408.6	3697.6	4016.4	4331.9	4603.3	4873.3	5131.2	5436.2	5751.9	6077.8	6450.1
72.5°	2675.1	2925.6	3236.4	3542.7	3815.0	4086.0	4336.4	4648.6	4966.3	5308.6	5661.2
75°	1782.9	1969.9	2201.5	2485.6	2735.3	2974.8	3217.5	3481.5	3791.5	4073.7	4396.2
77.5°	1009.8	1118.2	1252.9	1437.6	1616.7	1760.1	1933.2	2057.4	2237.4	2392.7	2556.8
80°	519.8	549.0	589.2	633.5	658.7	654.8	680.5	655.1	660.7	639.9	617.7
82.5°	382.1	392.2	410.4	419.3	418.4	389.2	358.1	315.0	277.0	237.2	200.5
85°	259.7	266.2	270.7	277.6	275.7	263.0	235.0	197.6	161.1	129.3	103.4
87.5°	45.0	46.2	45.9	49.8	49.9	46.3	38.1	32.5	27.4	20.4	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3
2.5°	1635.0	1635.0	1635.9	1635.0	1635.0	1635.0	1634.5	1635.4	1635.0	1633.6	1632.2
5°	1656.4	1655.0	1654.5	1655.4	1656.4	1654.6	1655.9	1657.3	1655.0	1655.4	1654.5
7.5°	1692.2	1691.7	1691.2	1692.2	1692.2	1691.6	1692.2	1690.8	1689.8	1691.2	1692.6
10°	1740.0	1739.5	1740.4	1740.4	1742.3	1741.4	1740.9	1742.3	1741.4	1740.4	1740.9
12.5°	1796.2	1794.8	1797.1	1797.1	1798.5	1798.6	1798.0	1798.5	1798.0	1796.6	1795.7
15°	1846.4	1844.5	1845.0	1848.6	1848.2	1849.2	1849.2	1848.2	1847.8	1847.3	1847.7
17.5°	1876.6	1875.6	1875.6	1877.4	1878.8	1878.4	1878.4	1878.4	1877.9	1878.4	1879.3
20°	1882.2	1882.1	1882.6	1884.4	1886.8	1885.4	1885.4	1886.3	1885.4	1886.3	1886.8
22.5°	1871.4	1872.4	1873.3	1875.6	1876.0	1876.0	1876.1	1876.6	1877.4	1877.5	1878.4
25°	1856.6	1857.5	1858.9	1860.8	1862.6	1862.6	1862.6	1863.6	1863.6	1864.0	1864.5
27.5°	1845.4	1846.4	1847.8	1849.6	1851.9	1852.0	1852.0	1852.8	1852.8	1853.3	1854.2
30°	1846.8	1845.0	1846.4	1847.3	1848.7	1848.6	1848.2	1848.6	1849.2	1849.2	1849.6
32.5°	1866.8	1862.6	1861.2	1860.8	1861.2	1859.8	1859.4	1858.4	1857.5	1857.5	1857.0
35°	1919.8	1913.2	1912.8	1909.0	1905.4	1901.6	1902.1	1899.3	1900.2	1897.9	1896.0
37.5°	2028.4	2021.0	2025.6	2017.7	2012.6	2009.0	2004.7	1999.2	1995.9	2000.1	2000.1
40°	2223.0	2217.9	2216.6	2218.0	2213.3	2215.6	2205.4	2202.6	2196.6	2200.8	2206.3
42.5°	2492.0	2488.8	2506.4	2509.6	2511.5	2514.2	2516.2	2500.8	2500.4	2497.1	2487.8
45°	2824.1	2843.6	2842.6	2864.0	2865.0	2858.4	2861.2	2854.3	2851.5	2841.3	2853.8
47.5°	3165.5	3202.7	3216.6	3221.2	3238.9	3243.1	3226.4	3220.8	3230.6	3213.8	3216.1
50°	3532.0	3571.9	3604.4	3626.3	3638.8	3639.7	3627.2	3624.4	3633.2	3601.6	3616.5
52.5°	3892.4	3952.8	4014.2	4046.6	4069.8	4071.7	4081.4	4069.9	4074.5	4067.1	4081.9
55°	4247.8	4352.2	4424.2	4487.9	4528.3	4563.2	4566.4	4579.0	4579.9	4595.2	4579.9
57.5°	4595.2	4709.0	4834.4	4947.3	5010.0	5049.5	5086.6	5137.3	5148.4	5142.4	5152.1
60°	5005.4	5181.4	5351.9	5482.0	5590.1	5693.7	5749.5	5828.9	5841.4	5875.8	5846.1
62.5°	5523.7	5779.2	6010.5	6185.6	6350.0	6511.2	6633.0	6694.2	6731.4	6803.4	6779.7
65°	6318.9	6625.4	6931.6	7182.4	7412.8	7604.6	7789.6	7877.8	7975.3	8077.5	8096.1
67.5°	6973.9	7353.4	7698.4	8004.1	8283.2	8496.4	8688.8	8841.6	8960.5	9035.8	9041.8
69°	7003.6	7398.0	7772.8	8100.7	8392.0	8618.6	8821.2	8991.2	9106.8	9183.9	9204.3
70°	6861.4	7265.1	7664.6	7995.8	8294.0	8525.7	8740.4	8902.4	9031.6	9110.0	9137.5
72.5°	6062.0	6493.1	6920.0	7210.3	7515.0	7790.9	7962.8	8128.2	8310.2	8333.9	8409.1
75°	4778.6	5141.0	5472.2	5694.2	5948.7	6196.3	6364.9	6408.5	6503.8	6623.6	6580.9
77.5°	2769.3	2880.8	3094.5	3149.2	3102.8	3210.5	3246.3	3170.2	3166.4	3236.5	3097.2
80°	613.6	578.8	622.4	589.9	590.8	591.8	582.0	578.3	585.2	578.3	568.5
82.5°	170.0	164.4	165.4	163.5	166.8	164.4	163.0	166.8	166.3	165.8	169.1
85°	81.8	80.8	79.4	79.0	77.1	74.8	71.1	71.1	72.9	70.1	71.5
87.5°	10.7	10.2	10.2	12.1	10.7	8.9	8.9	8.9	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)